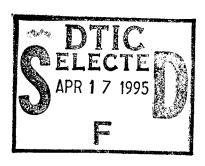
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Naval War College Newport, RI



THEATER ORGANIZATION: A COMMAND AND CONTROL FRAMEWORK AND ANALYSIS

By

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A paper submitted to the Faculty of the Naval War College in partial satisfaction of the requirements of the Department of Joint Military Operations.

The contents of this paper reflect my own personal views and are not necessarily endorsed by the Naval War College or the Department of the Air Force.

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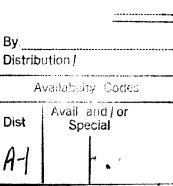
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Abstract of

THEATER ORGANIZATION: A COMMAND AND CONTROL FRAMEWORK AND ANALYSIS

Command and control (C²) is at the heart of military campaigns and major operations. To orchestrate his campaign plan, the theater-level commander must make appropriate and sound organizational decisions. Ultimately, his organizational decisions can make the difference between success and failure. In the C² process, the organization provides the conduit for a commander's information and operational decisions. In our most recent conflict, the Persian Gulf War, USCINCCENT's organizational decisions positively contributed to his ability to wage a successful military campaign. He achieved unity of effort among the US joint forces and the multinational coalition forces.

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THEATER ORGANIZATION: A COMMAND AND CONTROL FRAMEWORK AND ANALYSIS

Nowadays luck only stays with the good general who has a good system of command and control.

Richard Simpkin, Race to the Swift

INTRODUCTION

Command and control (C²) is at the heart of military campaigns and major operations. The C² process and supporting Command, Control, Communications, Computer, and Intelligence (C⁴I) systems are critically important because they enable commanders at all levels to make decisions and issue directives. The intended outcome of the C² process is decisive application of the military instrument of power across the spectrum of conflict. When a crisis occurs in a theater CINC's Area of Responsibility (AOR), he plans and executes a campaign or major operation that synchronizes the deployment and employment of multiservice and sometimes multinational combat forces in a given theater of operations to accomplish an assigned mission. To orchestrate his campaign plan, the theater-level commander makes organizational, informational, and operational decisions.¹

A commander's organizational decisions directly influence and enable subsequent informational and operational decisions. Ultimately his organizational decisions can make the difference between success and failure in military operations. In our most recent conflict, the Persian Gulf War, USCINCCENT's organizational decisions positively contributed to his ability to wage a successful military campaign. Through effective leadership, sound

organization, and resolute cooperation, he achieved unity of effort among the US joint forces and the multinational coalition forces.

This paper focuses on the organizational aspects of C² and presents a practical framework and analysis of a theater commander's C² organization for war. The framework addresses C² in general, command structures and relationships, and organizational considerations for operations involving combined (i.e., multinational) forces. The organizational framework will be the basis for analyzing the theater C² organization in our most recent conflict, the Persian Gulf War. Finally, the paper will conclude with some C² lessons.

THEATER ORGANIZATION: A PRACTICAL C2 FRAMEWORK

C² Overview

A good starting point for a C² discussion is to begin with a definition. Joint Pub 1-02, Department of Defense Dictionary of Military and Associated Terms defines command and control as follows:

The exercise of authority and direction by a properly designated commander over assigned forces in the accomplishment of the mission. Command and control functions are performed through an arrangement of personnel, equipment, communications, facilities, and procedures employed by a commander in planning, directing, coordinating, and controlling forces and operations in the accomplishment of the mission.²

In other words, C² is a process that includes a commander and his organization, a decision-making cycle, and supporting systems. The commander uses his organization and the decision-making cycle to plan, direct, coordinate, and control forces and operations to accomplish a mission. Communications, computers, and intelligence are supporting elements of the command and control process.

The commander's decision cycle operates as a continuous, closed loop. It begins with gathering information on the enemy, friendly forces, and the theater environment. Intelligence systems provide much of the information a commander needs to make operational decisions. The commander relies on the intelligence community, to collect, process (filter, fuse, and analyze), and disseminate relevant information. He also relies on his subordinate commanders and forces to provide feedback on the outcome of previous actions, as well as any other relevant information. Using all available information, the commander then assesses the situation. Next, he evaluates alternative actions and decides which action will most likely achieve the desired outcome. After making his decision, he issues a directive. Following execution, he receives feedback and the cycle starts over. There are many factors which contribute to the effectiveness and efficiency of this process, most importantly the C² organization. Poor organizational decisions at the operational level can result in tactical defeat and have grave strategic consequences, as was the case in the failed Iranian hostage rescue attempt in 1980--a C² catastrophe. Obviously, a commander's organizational decisions "exert a major influence on the process of command and control..."

Command Structure and Relationships

Organizational decisions are made at all levels of command and begin with the US Commander in Chief, the President. The Unified Command Plan (UCP), which is approved by the President, establishes the nine combatant commands currently in existence. Five combatant commanders have regional responsibilities based on a geographic area: US Atlantic Command, US Central Command, US European Command, US Pacific Command, and US Southern Command. The remaining four combatant commands have specific functional

responsibilities and are not restricted to operations in any particular geographic area: US Space Command, US Special Operations Command, US Strategic Command, and US Transportation Command. The UCP also assigns primary tasks, defines a commander's authority, establishes command relationships, and gives guidance on exercising combatant command. When the President selects the military instrument of power to solve a problem, he assigns, with the advice of the CJCS, one of the unified CINCs, usually a regional CINC, as the mission commander. The CINC is legally appointed by the NCA to exercise authority and responsibility over assigned military forces and is directly responsible to the NCA for the accomplishment of the assigned mission. This CINC is designated as the supported commander. The NCA will also designate which CINCs are supporting commanders.

The mission commander is the "brain" and key decision maker in the C² process. One of his primary wartime responsibilities is to organize his command for war. To plan and wage a successful military campaign, he must make organizational decisions that support the making of subsequent informational and operational decisions. One author described the mutual relationship between these three types of decisions as follows:

...organizational decisions (1) support the making of information decisions by identifying which organizations may be tasked to obtain information, and by structuring the flow of information and advice to the commander; (2) support the making of operational decisions by structuring the flow of advice to the commander about [use] of forces; and (3) facilitate the execution of operational decisions by establishing a chain of command.⁵

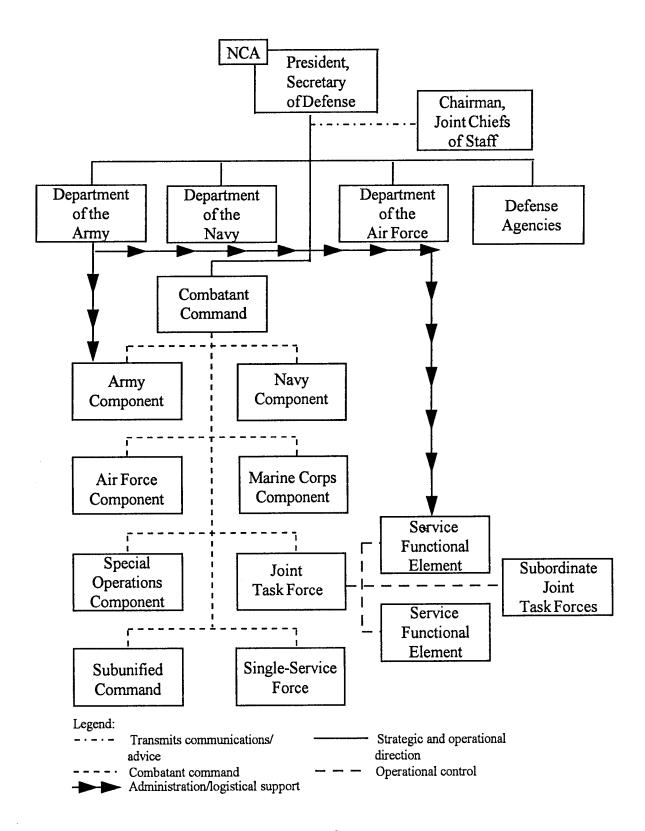
The CINC structures his military forces to accomplish the assigned mission. He prescribes a chain of command and designates his subordinate commander's command authority and responsibilities. The CINC normally gives immediate subordinate commanders operational control (OPCON) of assigned or attached forces.⁶ In the end, sound organizational decisions

create clear, unambiguous command relationships, define roles and responsibilities of subordinate commanders, empower subordinate commanders with the appropriate level of authority, and establish information sources and flow required for operational decision making.⁷

When selecting an organizational structure, a CINC should base his decision primarily on the mission, objectives, and tasks; the nature and scope of the military operations; and the capabilities, as well as limitations of subordinate commanders and assigned forces. Other factors include available time and space, mobility, and logistics. Ideally, the organizational structure should promote unity of effort, centralized planning, and decentralized execution. The best way to achieve unity of effort is by employing unity of command, i.e., designate a single responsible commander. If this is not possible, as may be the case with a multinational coalition, unity of effort can be achieved through close cooperation. A single overall commander with combatant authority in combined operations has been the exception rather than the norm. The CINC's organizational choices should also consider the level of interoperability, i.e., common doctrine, procedures, and equipment, that multiservice or multinational forces can obtain. If the level of interoperability is low or nonexistent and there is not time to remedy the situation, the CINC will have to make appropriate adjustments to his organization, particularly if he wants to achieve unity of effort.

A combatant commander has several available options to organize the military forces under his command (see Figure 1). In general, a CINC can organize his forces by geographic area, by service or nation, by function, by task, or any combination thereof. Joint Pub 0-2, Unified Action Armed Forces, provides joint force commanders (JFCs) guidance on various

Figure 1
Joint Force Relationships¹¹



organizational structures. All unified commands include service component commands. At his discretion, a CINC can organize his command structure for a particular mission using the existing service components and/or any combination of the following: a subordinate unified command, a single service force, a joint task force, a functional component (grouping together all air, ground, or naval forces from two or more services or nations), or a direct command over specific operational forces.¹² An insufficient level of interoperability between joint or combined forces may require a CINC to assign subordinate units to a specific area of operation or task.

Aside from selecting an overall organizational structure, the CINC must designate an operational JFC for the theater of operations. Depending on the scope of the operations and the particular theater C² organization he employs, he may decide to retain this position. If the CINC chooses to retain this position, he must consider the potential impact of this decision. He obviously ca not be in two places at once should another conflict occur in his AOR. The CINC must also designate his functional component commanders, if applicable. He should designate a commander from the service that has the preponderance of forces. If the functional component commander, such as a Joint Forces Air Component Commander (JFACC), is also a service component commander, he too must decide whether he should continue to act in his service capacity or delegate the position to a deputy.

To successfully employ joint forces, the JFC needs a capable staff that can advise him on force capabilities and limitations, which differ across services. Therefore, his staff's composition should reflect the composition of the joint forces under his command. This applies to a sub-unified, a functional component, or a joint task force commander's staff as

well, because he employs forces from more than one service.¹³ To facilitate coordinated operations, a functional component commander should also augment his staff with liaison officers from the service components.

Organizing Combined Forces

Since World War I, the US has fought most conflicts as a member of a multinational coalition. We can expect this trend to continue in the future, particularly in light of the US military draw down. When organizing US joint forces with multinational forces, a CINC must consider military differences in doctrine, organization, and equipment, as well as cultural, language, and religious differences. The CINC can accommodate differences by assigning a national single-service or joint force to an area of operations or a specific task, such as electronic warfare.¹⁴

Whatever organizational arrangements he makes, the JFC cannot expect a foreign country to relinquish command of its forces to a US commander, just as we would not want to allow foreign command of US forces. Therefore, it is highly unlikely coalition members will agree to designating a single "supreme" commander. If achieving unity of command in a combined operation is politically infeasible, the JFC can ensure unity of effort through cooperation and coordinated planning and policies. This is where liaison officers can serve a valuable function. They can assist in the communication and coordination process between nations. Most importantly, the glue that holds a coalition together is a common purpose or aim. It is essential individual national forces have a mutual understanding of the overall aim. The JFC can improve his chances of success when operating with multinational forces by following the

principle of simplicity, i.e., avoid creating complex organizational structures, command relationships, and plans.¹⁵

THEATER ORGANIZATION: A C² ANALYSIS--THE PERSIAN GULF WAR

The C² framework for theater organization provides a template for examining and assessing the theater command and control organization used during the Persian Gulf War for Operations Desert Shield/Desert Storm. USCINCCENT's organizational decisions were an important factor in waging a decisive military campaign as a nation and in concert with multinational coalition forces.

US Command Structure and Relationships

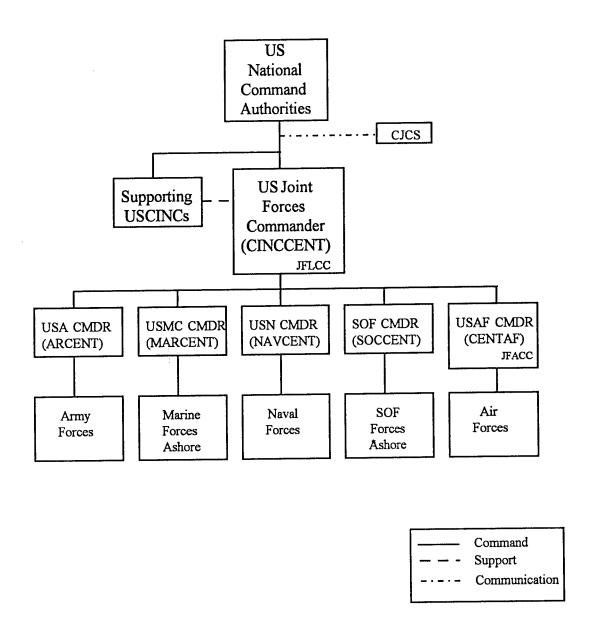
On 6 August 1990, President Bush decided to use the military option to stop further Iraqi aggression against Kuwait. The NCA issued the initial order to deploy forces to the Gulf. The President assigned USCINCCENT, General H. Norman Schwarzkopf, the responsibility for accomplishing the mission. USCINCCENT was designated the supported CINC for operations because Kuwait is part of his AOR. The Commanders-in-Chief, Europe, Atlantic, Pacific, Special Operations, Space, Transportation, South, Forces, and Strategic Air Command were the supporting CINCs. 16

Although USCINCCENT is responsible for all military operations in his AOR, he had the option to designate an operational commander for the Kuwait theater of operations (KTO). Instead, he retained overall operational control of the US forces and military operations. He served both as the theater-strategic and the operational commander for the military campaign. Since USCENTCOM is located at MacDill AFB, FL, USCINCCENT established CENTCOM Forward and deployed his headquarters to Riyadh. This command arrangement worked well

and contributed to effective theater C². It provided for staff continuity and reduced the chain of command between the NCA and the operational commander by one level. However, USCINCCENT would have faced a C² dilemma if another significant conflict requiring his personal attention occurred elsewhere in his AOR. This could have had destabilizing effects on operations in the KTO.

In establishing his US joint command structure, USCINCCENT employed USCENTCOM's existing peacetime organizational structure. This structure consisted of an Army (Third US Army), Air Force (Ninth Air Force), Navy (Seventh Fleet), and Marine (I Marine Expeditionary Force) service component, and a Special Operations component (see Figure 2). "This structure maintained continuity, ensured component commanders were responsible for service missions in theater, and smoothed the transition to a wartime organization."¹⁷ Additionally, USCINCCENT's organizational decision to use the existing CENTCOM organization made sense considering the mission, objectives, tasks, and the nature and scope of the operations in the Persian Gulf War. The US faced an opponent with a formidable military force. During Desert Shield, USCINCCENT required naval forces to enforce the economic sanctions against Iraq and maintain free world access to petroleum sources. He also needed air and ground forces to deter further Iraqi aggression and defend the Saudi Arabian Peninsula. During Desert Storm, he required air, naval, and ground forces to support his offensive strategy with the objectives of destroying Iraqi C², ejecting Iraqi forces from Kuwait, destroying the Republican Guard, destroying Iraq's weapons of mass destruction capabilities, and assisting in the restoration of Kuwait's legitimate government. 18

Figure 2
USCENTCOM Command and Control Relationships¹⁹



Another key organizational decision made by Gen Schwarzkopf was to organize all theater air assets under a functional component command and designate a JFACC. Since the CENTAF commander, Lt Gen Charles A. Horner, had the preponderance of air assets, USCINCCENT appointed him as the first ever wartime JFACC. CENTAF did not delegate his command authority over the Ninth Air Force; therefore, he wore two command "hats." As the JFACC, he was responsible for coordinating and synchronizing all coalition air forces and did this using a single Air Tasking Order (ATO). Additionally, to facilitate the coordination effort, CENTAF provided Air Force liaison officers to the Navy and Marines who in turn provided liaison officers to CENTAF. He did not create a full-fledged joint planning staff as recommended in Joint Pub 0-2, Unified Action Armed Forces.

For the most part, the JFACC organizational arrangement worked well. The air operations were a "stunning success" which paved the way for the collapse of the Iraqi military. Coalition aircraft flew 109,876 sorties, dropped 88,500 tons of bombs and shot down 35 Iraqi planes in air-to-air combat.²¹ This success originated "directly from Gen Schwarzkopf's delegating approach" and his decision to designate a JFACC.²² The JFACC concept provided for centralized planning, decentralized execution, and the integration of the US services' and allies' distinct air capabilities into high tempo air operations.²³

On the other hand, this C^2 organizational arrangement was not flawless. First, the JFACC did not have a joint staff. The lack of "jointness" in the air operations was assessed as follows:

The JFACC was at its core an Air Force staff. It was joint only to the extent that liaison officers from other services and the coalition air forces were temporarily assigned to it.... Where joint doctrine was lacking, Air Force doctrine and organizational practices were used by default if not preference.²⁴

This hampered the JFACC staff's ability to have a joint approach and to optimally employ each service's unique capabilities.

Second, the JFACC position and the ATO process were "not only new but somewhat controversial" among the services. This ultimately affected command relationships and unity of effort.²⁵ The Navy and the Marine Corps were not accustomed to the JFACC concept and were not comfortable with the ATO process.²⁶ In spite of the 1986 Omnibus Agreement which permits the JFACC to task excess Marine sorties, the Marines and the Air Force did not agree on the JFACC's authority. Many Marines viewed the JFACC merely as a coordinator, not a commander. Further, they thought the ATO process was complex and not responsive enough.²⁷ Some of the senior Navy officers lacked confidence in an ATO their staffs did not create. Previous to Desert Storm, many Navy personnel on the USS Blue Ridge flagship had not worked with the CENTAF staff and thus lacked understanding and experience with the ATO process. To compound the C² situation, CENTAF was not able to distribute the ATO electronically to the USS Blue Ridge because the Navy did not have interoperable equipment.²⁸ The Army Corps commanders and ARCENT staff had problems with the JFACC too. They complained the JFACC was not providing them the required support and criticized the Air Force for targeting only 300 of their 2,000 nominated targets.²⁹

In brief, command relationships, unity of effort, and interoperability among the services could have been better for theater air operations. If the services had exercised the JFACC concept prior to the Persian Gulf conflict, they could have identified and resolved many of their problems and concerns. An abundance of air assets masked many of the doctrinal issues

and "allowed commanders to dodge difficult command and control issues." This abundance may not exist in future conflicts.

Although Gen Schwarzkopf employed a JFACC, he decided not to designate a separate Joint Forces Land Component Commander (JFLCC). He retained this function instead of delegating the responsibility because his mission required integration of "vastly different" multinational ground forces. Gen Schwarzkopf had a vision for operationally maneuvering his ground forces against the Iraqi forces in Kuwait, and he wanted to personally direct the effort. Although USCINCCENT successfully coordinated and directed the ground phase of Desert Storm, a more appropriate organizational option was to designate his senior subordinate ground commander as the JFLCC. An operational commander needs to maintain the "big picture." If he is too involved at the operational-tactical level, he could easily lose sight of the overall campaign or operation. USCINCCENT was commanding at too many levels—the theater-strategic, operational, and operational-tactical. He is fortunate this did not impact the overall campaign execution.

Throughout Desert Shield/Storm, SOCCENT remained a sub-unified command. A single commander centrally controlled the multiservice special operation forces (SOF), and SOCCENT planners worked closely with ARCENT and CENTAF to select areas of operation and targets for SOF missions.³¹ This arrangement enhanced unity of effort and provided for effective integration of SOF forces into the overall campaign plan.

Organizing the Coalition

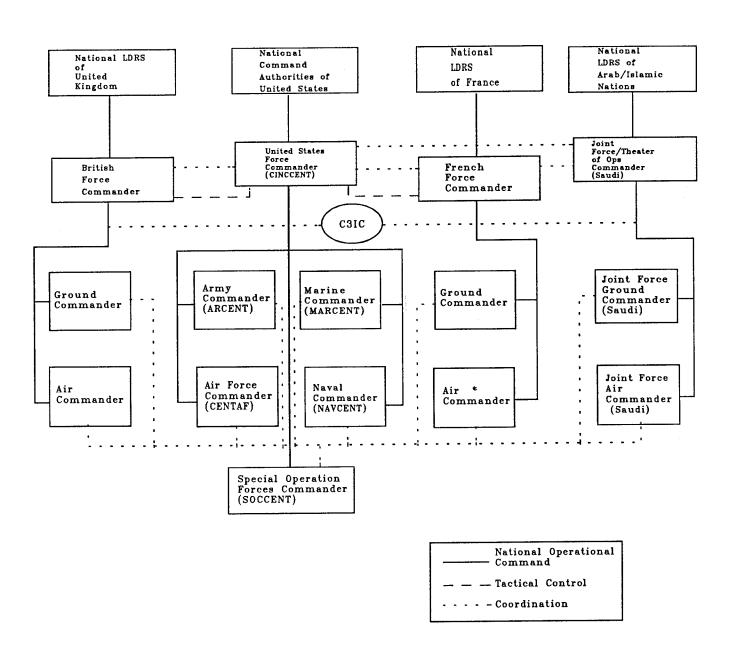
Over 200,000 forces from over 40 nations joined in the region to form the largest allied coalition since World War II.³² With political consensus among these nations that Iraq's

aggression against its neighbor, Kuwait, was unfounded and unacceptable, they mutually agreed on denying further Iraqi aggression and preventing instability in the Gulf region. This became the basis for the coalition's common purpose and provided the "cohesive glue."

Commanders from the various nations had to make command arrangements that satisfied each nations' political and military requirements. Cultural, language, and religious differences played a role in their decisions too. Participating nations were not willing to relinquish national command of their forces to a single coalition commander; however, in some cases they allowed their forces to come under operational or tactical control of other nations' commanders. For example, UK forces were OPCON to USCINCCENT, and French forces were initially TACON to the Saudis and later were TACON to ARCENT. Individual nations were under the command of their national authorities, and they established parallel chains of command (see Figure 3). For example, the Saudi's created a command structure, Joint Forces Command, separate from but parallel to CENTCOM Forward. They organized their forces by geographical areas: North and East. Within each of these areas, forces were further organized by tasks. All foreign Islamic and Arab forces, such as the Syrians and Egyptians, operated under Saudi operational command. Having all regional forces under the Saudis simplified coordination for USCINCCENT.³³

Since unity of command was not possible for the coalition, USCINCCENT had to rely on cooperation and close coordination to achieve unity of effort among the member nations. USCINCCENT and his subordinates took the lead initiating arrangements that would promote cooperation. Arrangements included some combined planning and the use of language-qualified liaison officers.³⁴ Additionally, ARCENT's deputy set up a rudimentary combined

Figure 3
Coalition Command Relationships³⁷



headquarters in August 1990. This later became the Coalition Coordination, Communication, and Integration Center (C³IC).³⁶ The center was collocated with the CENTCOM Forward and Saudi Headquarters, Joint Operations Center (JOC), and Joint Intelligence Center (JIC). The C³IC could have operated more effectively as a Combined Command Center if it was integrated with the JOC and JIC.³⁷ This would have eliminated duplication and placed the center within the established command and staff channels as a formal command center.

Despite these drawbacks, the C³IC was a "bridge" between CENTCOM and the Saudi command.³⁸ Unity of effort was especially crucial for the ground offensive and depended on cooperation and coordination with the Saudi ground forces as well as other countries' forces.³⁹ They used the C³IC to coordinate all ground operations. USCINCCENT, acting as the JFLCC, also promoted coalition unity through his close working relationship with the commander of the Joint Forces/Theater of Operations Command, Lt Gen Khalid.

The C³IC was not used by the JFACC. The ATO was his coordination tool for coalition air operations. The Saudis easily adapted to the ATO process.⁴⁰ It was a cooperative effort. The JFACC even convinced the coalition members to use the US aircraft Rules of Engagement.

On the whole, USCINCCENT's organizational decisions concerning the US command structure and relationships worked well. He and his subordinates took measures to ensure effective coordination and cooperation between coalition members. The coalition's collective efforts to deny further Iraqi aggression and liberate Kuwait definitely profited from the member nations' cooperative relationship. The end result was centralized planning,

decentralized execution, and a unified effort in waging a historically successful military campaign.

CONCLUSION

The Theater C² Framework and Analysis communicates some important lessons. Indeed, a commander's C² organizational decisions play a key role in military operations. These decisions create the organization providing the conduit for a commander's information and operational decisions. Properly conceived and sound command structures and relationships support and facilitate a commander's ability to command and control his forces and enhance unity of effort. A commander has a multitude of organizational options. What worked organizationally for a JFC last time might not work in the next conflict because each situation is unique. We rarely fight the same war twice. A commander has to keep the mission in the forefront of his organizational decisions. Fighting as a member of a coalition adds another dimension to his decision-making matrix. Even if political sensitivities do not allow for a single combined commander, the JFC can make organizational arrangements to promote a cooperative, coordinated, and unified effort among coalition members. Bottom line: proper command structures, relationships, and coalition organizational arrangements are necessary conditions for waging successful military campaigns. Remember UNITY:

- •Unity of purpose, command, and effort,
- National goals and objectives,
- $\bullet Interoperability,$
- •Teamwork, and
- •You, the commander, are responsible for making it happen.

NOTES

- ¹ Frank M. Snyder, <u>Command and Control: The Literature and Commentaries</u> (Washington, DC: National Defense University, 1993), pp. 12-13.
- ² Joint Chiefs of Staff, <u>Department of Defense Dictionary of Military and Associated</u> Terms, Joint Pub 1-02 (Washington DC: 29 March 94), p. 78.
 - ³ Snyder, p. 47.
- ⁴ Armed Forces Staff College, <u>The Joint Staff Officer's Guide 1993</u>, AFSC Pub 1 (Washington, DC: US Govt. Print. Off., 1993), p. 2-23.
 - ⁵ Snyder, pp. 42-43.
- ⁶ Joint Chiefs of Staff, <u>Unified Action Armed Forces</u>, Joint Pub 0-2 (Washington DC: 11 August 1994), p. III-13.
 - ⁷ Snyder, p. 18.
- ⁸ Department of the Air Force, <u>Basic Aerospace Doctrine of the United States Air Force</u>, <u>Volume II</u>, AFM 1-1 (Washington DC: HQ USAF, March 1992), p. 263.
- ⁹ Harry G. Summers, Jr., On Strategy II: A Critical Analysis of the Gulf War (New York: Dell Publishing, 1992), p. 239.
 - ¹⁰ Snyder, p. 44.
- Headquarters, Department of the Army, <u>Operations</u>, FM100-5 (Washington DC: 14 June 1993), p. 4-3.
 - ¹² Joint Chiefs of Staff, <u>Unified Action Armed Forces</u>, p. IV-7.
 - ¹³ Ibid., pp. IV-3, IV-5.
 - ¹⁴ Ibid., p. I-11.
 - ¹⁵ Ibid., pp. I-10-11, IV-3.

¹⁶ Department of Defense, <u>Conduct of the Persian Gulf War: Final Report to Congress</u> (Washington DC: April 1992), p. K-6.

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- ¹⁹ Department of Defense, <u>Conduct of the Persian Gulf War: Final Report to Congress</u>, p. K-8.
 - ²⁰ Ibid., p. I-41.
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- ²² John H. Cushman, "Command and Control In the Coalition," <u>US Naval Institute</u> <u>Proceedings/Naval Review</u>, 1991, p. 77.
- ²³ Headquarters, United States Air Force, Deputy Chief of Staff, Plans and Operations, <u>IFACC Primer</u> (Washington DC: February 1994), p. 6.
- ²⁴ James A. Winnefeld and Dana J. Johnson, "Unity of Control: Joint Air Operations in the Gulf," <u>Joint Force Quarterly</u>, Summer 1993, p. 93.
- ²⁵ Gulf War Air Power Survey: Vol. I, Planning and Command and Control, Part II, p. 42.
- ²⁶ Headquarters, United States Air Force, Deputy Chief of Staff, Plans and Operations, p. 6.
- ²⁷ <u>Gulf War Air Power Survey: Vol. I, Planning and Command and Control</u>, Part II, pp. 42, 50-51.

- ²⁹ Ibid., pp. II-59-60; Sterling D. Sessions and Carl R. Jones, <u>INTEROPERABILITY: A</u>
 <u>Desert Storm Case Study</u> (Washington DC: National Defense University, July 1993), p. 4.
 - Winnefeld, p. 90.

¹⁷ Ibid., p. K-5.

²⁸ Ibid., pp. 53-55.

³¹ Department of Defense, <u>Conduct of the Persian Gulf War: Final Report to Congress</u>, pp. K-5, K-19.

- ³³ Department of Defense, <u>Conduct of the Persian Gulf War: Final Report to Congress</u>, pp. K-20-21.
- ³⁴ Terry J. Pudas, "Preparing Future Coalition Commanders," <u>Joint Force Quarterly</u>, Winter 1993/94, pp. 41-42.
- ³⁵ Department of Defense, <u>Conduct of the Persian Gulf War: Final Report to Congress</u>, p. K-29.
- ³⁶ Gulf War Air Power Survey: Vol. I, Planning and Command and Control, Part II, pp. 46.
- ³⁷ This was discussed in Joint Universal Lessons Learned: 51356-45300, Joint/Combined Operations.
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³² Summers, p. 238.

³⁹ Ibid., pp. K-12, K-7.

⁴⁰ Gulf War Air Power Survey: Vol. I, Planning and Command and Control, Part II, pp. 46-49.

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